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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/788,944	02/26/2004	Zhigang Fan	D/A3653	6674

7590 05/10/2007  
Patent Documentation Center  
Xerox Corporation  
Xerox Square 20th Floor  
100 Clinton Ave. S.  
Rochester, NY 14644

EXAMINER
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TABATABAI, ABOLFAZL

ART UNIT	PAPER NUMBER
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2624

MAIL DATE	DELIVERY MODE
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05/10/2007

PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

<b>Office Action Summary</b>	<b>Application No.</b> 10/788,944	<b>Applicant(s)</b> FAN ET AL.	
	<b>Examiner</b> Abolfazl Tabatabai	<b>Art Unit</b> 2624	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

#### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

#### Status

- 1) ☒ Responsive to communication(s) filed on 26 February 2004.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

#### Disposition of Claims

- 4) ☒ Claim(s) 1-10 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-10 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

#### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 26 February 2004 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

#### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

#### Attachment(s)

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)                                | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                       | 5) <input type="checkbox"/> Notice of Informal Patent Application                       |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)<br>Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____  |

## **DETAILED ACTION**

### **Claim Rejections - 35 USC § 102**

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

2. Claims 1-10 are rejected under 35 U.S.C. 102(b) as being anticipated by Huttenlocher et al (U.S. 5,539,841).

Regarding claim 1, Huttenlocher discloses a method of recording an input image as digital data, comprising:

determining input bounding boxes corresponding to objects in the input image (fig. 2, element 10 and column 11, lines 48-52);

comparing (fig. 2, element 24) data describing the input bounding boxes to data describing a set of reference bounding boxes (column 12, lines 44-56 and column 13, lines 27-44);

for an input bounding box sufficiently similar (column 12, lines 54-57) to a reference bounding box, comparing objects in the input bounding box and the reference bounding box (column 12, lines 44-56 and column 13, lines 27-44); and

if the object in the input bounding box is sufficiently similar to the object in the reference bounding box, coding the object (column 6, lines 65-67) in the input bounding box using a pointer (column 9, lines 31-35) to the object in the reference bounding box (column 12, lines 53-67).

Regarding claim 2, Huttenlocher discloses the method of claim 1, the comparing data describing the input bounding boxes step including considering an image type associated with the object in the input bounding box (column 8, lines 21-26).

Regarding claim 3, Huttenlocher discloses the method of claim 1, the comparing data describing the input bounding boxes step including considering at least one dimension of the input bounding box (column 13, lines 28-35).

Regarding claim 4, Huttenlocher discloses the method of claim 1, the comparing data describing the input bounding boxes step including determining that a number of input bounding boxes sufficiently similar to a reference bounding box is greater than a predetermined threshold (column 11, lines 22-43).

Regarding claim 5, Huttenlocher discloses the method of claim 1, the comparing objects step including considering a plurality of blocks within the input image-bounding box (column 12, lines 44-56).

Regarding claim 6, Huttenlocher discloses the method of claim 1, further comprising scanning a hard-copy image (column 8, lines 45-50); and deriving data relating to the input image from the hard-copy image (column 7, lines 20-21).

Claims 7 and 8 are similarly analyzed as claim 6 above.

Regarding claim 9, Huttenlocher discloses the method of claim 1, further comprising retaining data relating to a plurality of images in a database (column 7, lines 20-22); and determining one of the plurality of images to be the reference image (column 13, lines 28-33).

Regarding claim 10, Huttenlocher discloses the method of claim 1, the

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determining step including performing a matching operation between one of the plurality of images and the input image (column 15, lines 24-27).

### **Other Prior Art**

3. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Shmueli et al (U. S. 6,044,375) disclose automatic extraction of metadata using a neural network.

Abousleman (U. S. 7,020,335 B1) disclose methods and apparatus for object recognition and compression.

### **Contact Information**

4. Any inquiry concerning this communication or earlier communications from the Examiner should be directed to ABOLFAZL TABATABAI whose telephone number is (571) 272-7458.

The Examiner can normally be reached on Monday through Friday from 9:30 a.m. to 7:30 p.m. If attempts to reach the Examiner by telephone are unsuccessful, the Examiner's supervisor, Bhavesh Mehta, can be reached at (571) 272-7453. The fax phone number for organization where this application or proceeding is assigned is (571) 273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only.

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For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Abolfazl Tabatabai

Patent Examiner

Technology Division 2624

May 3, 2007

*A. Tabatabai*